

Chapter 1

COURSE OVERVIEW

Introduction

In the previous course on bridge construction, you learned the importance of a good foundation. It is just as important that a roadway has a good solid foundation. Whether it is an area where material must be removed to construct the roadway or in an area where a large embankment must be constructed, care must be taken to ensure a proper foundation for the pavement.

In this manual, you will be learning earthwork and all related items. We will begin by discussing the preparation of the right of way from building demolition to clearing of trees and brush to removal of sod.

Since the construction of embankments requires some knowledge of soil types you will spend time learning to recognize different types of soil. With this knowledge you will then learn about the actual construction of embankments and subgrades; from rock to shale, and from clay to granular material. A chapter will be spent learning earthwork measurements. Finishing of the new slopes and ditches will also be discussed.

Since the use and understanding of special fill (B Borrow) is important, a chapter will be spent in this area. Since most pavements are placed on an aggregate base you will learn about aggregate bases and sub-bases.

Finally, since embankment construction requires acceptance by testing, you will learn the testing requirements and the methods for performing the required tests. Laboratories may be set up to provide hands-on learning of these tests.

After you complete this course, you will understand terminology and construction requirements for embankments and aggregate bases.

Additional information about Earthwork can also be found in the General Instruction to Field Employees (GIFE), Section 3, Grading.

